

**REMARKS/ARGUMENTS**

Claims 1-2, 5, 7, 9-10, 12-13, 15, and 17-19 are pending. Claims 1, 7, 9, 15, 17, and 18 have been amended. Claims 3-4, 6, 8, 11, 14, 16, and 20-30 have been canceled. No new matter has been added to the amended claims.

***Claim Rejections - 35 U.S.C. § 103***

Claims 1, 2, 5, 7, 9, 10, 12, 13, 15, and 17-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McKnight (US 6,144,353) in view of Bonnett et al. (US 6,075,506). Applicants respectfully traverse this rejection.

Claim 1 recites, "applying a single transition voltage to the pixel electrode of each of the plurality of pixel elements on the display during a first period of time within a first field time," and thereafter "initiating application of a first paint voltage to one pixel electrode of the plurality of pixel elements during a second period of time within the first field time," among other elements. Applicants respectfully submit that neither the primary reference nor the secondary reference, either taken alone or in combination, teach or suggest at least these claim elements in the manner claimed.

As illustrated in FIG. 7A, McKnight modifies the voltage between the common electrode and ground (Pulse 401 = Common Electrode Voltage) to drive the display dark or bright (McKnight at col. 15, lines 23-37). Separately from Common Electrode Voltage, the Pixel Electrode Voltage ( $V_1$ ,  $V_2$ , or  $V_3$ ) is applied to the pixel electrode simultaneously with the application of each Pulse 401.

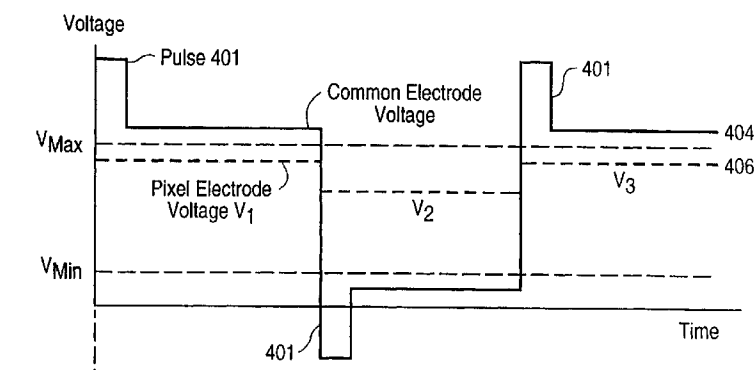


FIG. 7A

In contrast with McKnight, which applies pulses 401 to a common electrode to drive the liquid crystal to a bright state or a dark state, the claimed embodiment applies both the single transition voltage to the pixel electrode and the first paint voltage to the pixel electrode. Thus, McKnight does not teach or suggest at least these claim elements. Furthermore, Bonnett et al. does not make up for these deficiencies in McKnight. For at least these reasons, claim 1 is in condition for allowance.

Additionally, on page 4 of the Office action, the Examiner states:

"other embodiments of McKnight disclose driving the display pixel elements bright, prior to applying the paint voltage (see Figs. 7A-7C; Col 15, Line 23 - Col 16, Line 60)."

Applicants respectfully disagree with the Examiner's conclusion.

Specifically, McKnight does not teach or suggest driving the display pixel elements bright prior to applying the paint voltage as asserted by the Examiner. Rather, as clearly illustrated in FIG. 7A, McKnight shows the simultaneous application of the drive voltage to the common electrode and the pixel electrode. Referring to the transition from pixel electrode voltage  $V_1$  to pixel electrode voltage  $V_2$  as illustrated in FIG. 7A, the drop in voltage for Pulse 401 is simultaneous with the drop in pixel electrode voltage from  $V_1$  to  $V_2$ . For at least these reasons, McKnight does not teach or suggest "applying a single transition voltage to the pixel electrode" and thereafter "initiating application of a first paint voltage to one pixel electrode" as recited by claim 1.

Claims 2, 5, and 7, which depend from claim 1, are in condition for allowance, for at least the reasons discussed in relation to claim 1, as well as for the additional elements they recite.

Claim 9 recites, "a transaction circuit coupled to each pixel element in the plurality of pixel elements, the transaction circuit configured to apply a first transition voltage to each pixel electrode during a first time period within a first field time," and "a paint circuit coupled to the transaction circuit, the paint circuit configured to overwrite the first transition voltage and initiate application, while the liquid crystal material for each pixel element is performing the slow transition to the second state in response to the application of the first transition voltage, of a first paint voltage during a second time period within the first field time to

one pixel electrode," among other elements (emphasis added). As discussed in relation to claim 1, neither of the cited references, either taken alone or in combination, teach or suggest at least these claim elements in the manner claimed. For at least these reasons, claim 9 is in condition for allowance.

Claims 10, 12, 13, and 15, which depend from claim 9, are in condition for allowance, for at least the reasons discussed in relation to claim 9, as well as for the additional elements they recite.

Claim 17 recites, "an initializing circuit coupled to the plurality of pixels and configured to apply a first voltage to a pixel electrode of each of the plurality of pixels during a first time period of a first field" and "a driving circuit coupled to the initializing circuit and configured to write display data to a pixel electrode selected from the pixel electrodes," among other elements. As discussed in relation to claims 1 and 9, neither of the cited references, either taken alone or in combination, teach or suggest at least these claim elements. For at least these reasons, claim 17 is in condition for allowance.

Claims 18-19, which depend from claim 17, are in condition for allowance, for at least the reasons discussed in relation to claim 17, as well as for the additional elements they recite.

**CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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